CLAIMS

What is claimed is:

1.   A method, comprising:

copying an optimized library into a user space of a computer system, the optimized library including an optimized function for the computer system; and

exporting an entry point for the optimized function to be available to an application executing on the computer system.

2.   The method of claim 1, further comprising initializing a user library bound to the application, the user library to initiate the copying of the optimized library.

3.   The method of claim 1, further comprising making a call to the optimized function by the application to initiate execution of the optimized function.

4.   The method of claim 1 wherein exporting the entry point comprises exporting a memory address of the optimized function to a data structure associated with the application.

5.   The method of claim 1, further comprising allocating a buffer in user space to receive the optimized library when copied into the user space.

6. The method of claim 1, further comprising validating the optimized library before copying the optimized library into the user space.

7. The method of claim 6 wherein the optimized library is validated by verifying a signature of the optimized library.

8. The method of claim 1, further comprising advertising the optimized library by firmware of the computer system during operating system runtime.

9. The method of claim 1 wherein the plurality of optimized functions include code to optimize at least one operation of at least one hardware device of the computer system.

10. The method of claim 9 wherein the at least one hardware device includes a Central Processing Unit (CPU) of the computer system.

11. An article of manufacture comprising:

a machine-readable medium including a plurality of instructions which when executed perform operations comprising:

receiving a first request at a user library from an application executing on a computer system to initialize the user library;

copying an optimized library into a user space of a computer system in response to a second request by the user library, the optimized library including an optimized function for a hardware device of the computer system; and

initiating a third request to initialize the optimized library to export an entry point of the optimized function to a data structure associated with the application.

12. The article of manufacture of claim 11 wherein execution of the plurality of instructions further perform operations comprising returning a failure indicator by the user library to the application if the initialization of the user library failed.

13. The article of manufacture claim 11 wherein execution of the plurality of instructions further perform operations comprising requesting the operating system copy the optimized library into the user space via an application program interface (API).

14. The article of manufacture of claim 11 wherein execution of the plurality of instructions further perform operations comprising allocating a buffer in user space to receive the optimized library when copied into the user space.

15. The article of manufacture of claim 11 wherein the at least one hardware device includes a Central Processing Unit (CPU) of the computer system.

16. The article of manufacture of claim 11 wherein execution of the plurality of instructions further perform operations comprising generating the data structure for the application, the data structure to include a memory address corresponding to the optimized function.

17. The article of manufacture of claim 16 wherein exporting the entry point of the optimized function comprises entering a memory address of the optimized function in the data structure.

18. The article of manufacture of claim 11 wherein execution of the plurality of instructions further perform operations comprising exporting an entry point of a non-optimized function to the data structure in place of the entry point of the optimized function if an error occurs while exporting the entry point of the optimized function.

19. The article of manufacture of claim 11 wherein execution of the plurality of instructions further perform operations comprising generating a second data structure to register a function of the user library for use by the optimized library.

20. A computer system, comprising:

a processor; and

a storage device coupled to the processor, the storage device including instructions which when executed by the processor perform operations comprising:

recognizing an optimized library advertised by firmware of the computer system, the optimized library including a plurality of optimized functions for at least one hardware device of the computer system;

copying the optimized library into a user space of the computer system; and

exporting a plurality of entry points corresponding to the plurality of optimized functions to the computer system.

21.   The computer system of claim 20 wherein the optimized library is stored in firmware of the computer system.

22.   The computer system of claim 20 wherein the optimized library is stored on a hard disk accessible to the computer system.

23.   The computer system of claim 20 wherein execution of the instructions further perform operations comprising validating the optimized library before copying the optimized library into the user space.

24.   The computer system of claim 20 wherein the firmware to operate in accordance with an Extensible Firmware Interface (EFI) framework standard.

25.   The computer system of claim 20 wherein the at least one hardware device includes a Central Processing Unit (CPU) of the computer system.

26.   The computer system of claim 20 wherein exporting the plurality of entry

points comprises providing a plurality memory addresses corresponding to the

plurality of optimized functions to a data structure associated with the application.